UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,901	03/23/2000	Eric M. Foster	END00-0027-US1	9964

30743	7590	07/14/2004

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ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 07/14/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 15

Application Number: 09534901
Filing Date: March 23, 2000
Appellant(s): Foster et al.

MAILED

JUL 1 4 2004

Technology Center 2100

Marshall M. Curtis
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04/12/04

(1)   *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2)   *Related Appeals and Interferences*

A statement identifying the related appeals and interferences, which will directly affect or

be directly affected by or have a bearing on the decision in the pending appeal is contained in the

brief.

(3)   *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4)   *Status of Amendments After Final*

The appellant's statement of the status of the amendments after final rejection contained

in the brief is correct.

(5)   *Summary of Invention*

The summary of invention contained in the brief is correct.

(6)   ***Issues***

The appellant's statement of the issues in the brief is correct.

(7)   ***Grouping of Claims***

The appellants statement in the brief that each rounds of rejection provides a group of

claims, the following groups of claims are included herein:

I.   Claims 1-14

Additionally, appellants respectfully submit that within the Groups, the claims do not stand or

fall together.

(8)   ***Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9)   ***Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims
under appeal.

6,477,185	**Komi et al**	**11-2002**
6,459,427	**Mao**	**06-2002**

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1.   Claims 1-14 are presented for examination.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komi et al

(U.S. 6,477,185) and Mao (U.S. 6,459,427).

As per claim 1 & 8 Komi disclosed a method of filtering a data stream containing transport table

sections, said method comprising steps of determining presence of transport table sections in a

payload portion of a packet of said data stream from table identification (TID) field in a header

of said packet (col. 7, lines 16-21), and combining compare result values in accordance with a

logic values of not match bits in a not match indication register (col. 7, lines 22-26, whereby an

arbitrary length of said transport table sections are filtered by an arbitrary number of filters

having arbitrary filter functions (col. 7, lines 28-40).

Komi did not disclose in detail filtering a portion of said transport table sections in accordance

with a mask which defines a filter function and a logic state of a not match bit to provide a

compare result, selecting a next mask and a portion of said transport table sections in accordance

with a filter ID.

In the same field of endeavor Mao disclosed Basically the HTML pages (URLs) and their control

map information are either mapped directly onto the sections of the MPEG-2 transport stream or

mapped through an intermediate layer such as UDP/IP and then encapsulated in the sections of

the MEPG-2 transport stream. Multiple sections form a table. Each teable can be separated and

filtered by the set top decoder through tableID and /or table ID_extensions fields. The MPEG-2

table structure is segmented and carried over MPEG-2 transport packets, which can be filtered

through the PID (packetID) by the decoder (col. 7, lines 65-67 & col. 8, lines 1-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was

made to have incorporated disclosed filtering a portion of said transport table sections in

accordance with a mask which defines a filter function and a logic state of a not match bit to

provide a compare result, selecting a next mask and a portion of said transport table sections in

accordance with a filter ID as taught by Mao in the method of Komi to optimize bandwidth by

discarding unwanted Packets or sections of tables.

3.   As per claims 2 & 9 Komi-Mao disclosed wherein said filter ID is implemented in a

control word (Komi, col. 11, lines 5-11).

4.   As per claims 3 & 10 Komi-Mao disclosed wherein said Filter ID includes a section filter

ID and a next filter ID (Komi, col. 11, lines 5-11).

5.   As per claims 4 & 11 Komi-Mao disclosed wherein said combining step includes

ANDing or ORing compare result values of a bit or over a group of bits in accordance with logic

values of not match bits corresponding to sad bit or group of bits (Komi, col. 12, lines 26-37).

6.   As per claims 5 & 12 Komi-Mao disclosed wherein said combining step further includes

the step of accumulating a match word over a plurality of blocks of filtered data (Komi, col. 7,

lines 27-34)).

7.   As per claims 6 & 13 Komi-Mao disclosed wherein said step of accumulating a

matchword is performed by ANDing a current matchword bit with a corresponding bit of a

previous matchword if the filtering applied to the current block is positive or mixed filtering, and

ORing a current matchword bit with a corresponding bit of a previous matchword if the filtering

applied to the current block is negative filtering in accordance with said contents of said not

match indication register (Komi, col. 7, lines 27-41).

8.   As per claims 7 & 14 Komi-Mao disclosed wherein said step of accumulating a

matchword is performed in accordance with logic functions specified by at least one extra bit

(Komi, col. 12, lines 53-67).

(9)   ***Response to Arguments***

(A).   Applicant argued on Page. 11 Lines 10-13 that prior art does not disclose the *"table ID*

field of the claimed invention is in the header field of the table section data structure of the

MPED-2 standard. The MPEG-2 standard has a nested layering structure. The Packet Identifier

(PID) used by Komi et al. is part of the MPEG-2 Transport Stream header information. The

tables filter ID and Program ID with Not match bits".

As to applicants argument Komi disclosed the PID table contains N PID's , and index numbers

as storage numbers are allotted to the respective PID storage positions. When a user selects a

desired TS packet such as a program, the CPU designates a PID corresponding to the TS packet

in the PID table (col. 6, lines 15-21). The PID types are presented by hexadecimal four digits (4

bits*3+1 bit=13 bits). The 13-bit PID transferred from bus I/F 35 is compared with contents of

the PID reference table and it is with contents of the PID reference table, and it is determined

whether or not the payload of the TS packet includes the PTS including data step (col. 7, lines

22-26

(B).   Applicant argued on Page. 16-17 Lines (25-27 & 1-2) that *"packet ID in the prior art is*

not same as table identification (TID) filed in a header of said packet and subject invention is

using the data created by the program providers and is filtering using the Filter ID, table ID and

not much bits to facilitate the storage and fast retrieval of the program data".

As to applicants argument one ordinary skill in the art at the time of the invention knows that

TID has the same functionality as to PID in the header of the said packet. The ID in the header is

considered as filtering criteria where it can be named any thing but the functionality of the ID in

the header stays the same. According to one skill in the art at the time of the invention it is well

known that Header consist of different blocks of Ids where each Id assigned certain criteria. In

case of table Identification header is nothing different than the single digital packet header where

each ID field in the header has certain purpose or criteria to it.

(C).   Applicant argued on Page. 12, Lines 18-21 that prior art did not disclose the claimed

invention is *filtering on the table ID so as to capture the system table information from the*

transport stream. This table information can include program guides and other identifying

information. Once the information is captured, the claimed invention is looking for a change in

table information.

As to applicant's argument Applicant is arguing about the characteristic that is not within the

claim. Mao disclosed Mao disclosed Basically the HTML pages (URLs) and their control map

information are either mapped directly onto the sections of the MPEG-2 transport stream or

mapped through an intermediate layer such as UDP/IP and then encapsulated in the sections of

the MPEG-2 transport stream. Multiple sections form a table. Each teable can be separated and

filtered by the set top decoder through table ID and /or table ID_extensions fields. The MPEG-2

table structure is segmented and carried over MPEG-2 transport packets, which can be filtered

through the PID (packetID) by the decoder (col. 7, lines 65-67 & col. 8, lines 1-7). According to

Mao in the above statement made it clear that MPEG-2 transport packets uses PID (Packet ID) in

the header address to do the filtration of the packets. Applicant is reading the language of the

claim 1 very narrow. As claim 1 stated *"a method of filtering a data stream containing transport*

table sections, said method comprising steps of determining presence of transport table sections

in a payload portion of a packet of said data stream from table identification (TID) field in a

header of said packet, filtering a portion of said transport table sections in accordance with a

mask which defines a filter function and a logic state of a not match bit to provide a compare

result, selecting a next mask and a portion of said transport table sections in accordance with a

filter ID and combining compare result values in accordance with a logic values of not match

bits in a not match indication register, whereby an arbitrary length of said transport table

sections are filtered by an arbitrary number of filters having arbitrary filter functions". One

ordinary skill in the art at the time of the invention knows that the definition of filtration process

consists of comparing results against a specific value and using that result to decide that whether

you like to keep the result with that specific value. As to prior art Mao in the above statement

disclosed the filtration of the MPEG transport packets using the PID (Packet ID).

(D)   Applicant argued on Page. 15 Lines 7-8 as to claim 2 & 9 that *"subject invention requires*

that filter ID be implemented in a control word".

As to applicant's argument, Komi disclosed numeral denoted a packet read register; 352, an

index read requester, an IRQ controller; and an index buffer (col. 11, lines 7-9). A Packet read

register in the above statement has a index number that is used by the IRQ controller which has

the same functionality as to the control word.

(E)   Applicant argued on Page. 17 Lines 21-23 as to claim 3 and 10 that Prior art has been

created from the PIDs located in the packet headers and is not related to the table sections of the

MPEG-2 transport stream.

As to applicant's argument Komi's disclosure of the PID's located in the Packet does relates to

PID tables where the Table consist of index read register, index buffer and an IRQ controller

(col. 11, lines 5-11). According to one ordinary skill in the art at the time of the invention is well

known that MPEG-2 transport stream is first a digital data that consist of digital format where

digital format constitutes of packets that has headers attached to it.

                                                        Respectfully submitted,

A.M.

May 14, 2004

Conferees

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